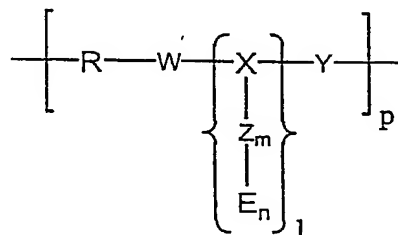


Claims

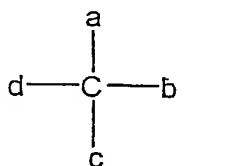
1. A combination of a carrier and a complex containing one or more nucleic acid molecules and one or more charged copolymers of the general formula I



wherein R is an amphiphilic polymer or a homo- or hetero-bifunctional derivative thereof,

and wherein X

- i) is an amino acid or an amino acid derivative, a peptide or a peptide derivative or a spermine or a spermidine derivative; or
- ii) wherein X is



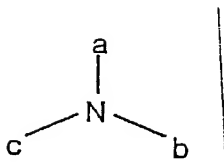
wherein

a is H or, optionally halogen- or dialkylamino-substituted, C₁-C₆ alkyl;

and wherein

b, c and d are the same or different, optionally halogen- or dialkylamino-substituted, C₁-C₆ alkylene; or

1961	21	1962	22	1963	23	1964	24	1965	25	1966	26	1967	27	1968	28	1969	29	1970	30	1971	31	1972	32	1973	33	1974	34	1975	35	1976	36	1977	37	1978	38	1979	39	1980	40	1981	41	1982	42	1983	43	1984	44	1985	45	1986	46	1987	47	1988	48	1989	49	1990	50	1991	51	1992	52	1993	53	1994	54	1995	55	1996	56	1997	57	1998	58	1999	59	2000	60	2001	61	2002	62	2003	63	2004	64	2005	65	2006	66	2007	67	2008	68	2009	69	2010	70	2011	71	2012	72	2013	73	2014	74	2015	75	2016	76	2017	77	2018	78	2019	79	2020	80	2021	81	2022	82	2023	83	2024	84	2025	85	2026	86	2027	87	2028	88	2029	89	2030	90	2031	91	2032	92	2033	93	2034	94	2035	95	2036	96	2037	97	2038	98	2039	99	2040	100	2041	101	2042	102	2043	103	2044	104	2045	105	2046	106	2047	107	2048	108	2049	109	2050	110	2051	111	2052	112	2053	113	2054	114	2055	115	2056	116	2057	117	2058	118	2059	119	2060	120	2061	121	2062	122	2063	123	2064	124	2065	125	2066	126	2067	127	2068	128	2069	129	2070	130	2071	131	2072	132	2073	133	2074	134	2075	135	2076	136	2077	137	2078	138	2079	139	2080	140	2081	141	2082	142	2083	143	2084	144	2085	145	2086	146	2087	147	2088	148	2089	149	2090	150	2091	151	2092	152	2093	153	2094	154	2095	155	2096	156	2097	157	2098	158	2099	159	2100	160	2101	161	2102	162	2103	163	2104	164	2105	165	2106	166	2107	167	2108	168	2109	169	2110	170	2111	171	2112	172	2113	173	2114	174	2115	175	2116	176	2117	177	2118	178	2119	179	2120	180	2121	181	2122	182	2123	183	2124	184	2125	185	2126	186	2127	187	2128	188	2129	189	2130	190	2131	191	2132	192	2133	193	2134	194	2135	195	2136	196	2137	197	2138	198	2139	199	2140	200	2141	201	2142	202	2143	203	2144	204	2145	205	2146	206	2147	207	2148	208	2149	209	2150	210	2151	211	2152	212	2153	213	2154	214	2155	215	2156	216	2157	217	2158	218	2159	219	2160	220	2161	221	2162	222	2163	223	2164	224	2165	225	2166	226	2167	227	2168	228	2169	229	2170	230	2171	231	2172	232	2173	233	2174	234	2175	235	2176	236	2177	237	2178	238	2179	239	2180	240	2181	241	2182	242	2183	243	2184	244	2185	245	2186	246	2187	247	2188	248	2189	249	2190	250	2191	251	2192	252	2193	253	2194	254	2195	255	2196	256	2197	257	2198	258	2199	259	2200	260	2201	261	2202	262	2203	263	2204	264	2205	265
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ino substituted, C₁-C₆ alkyl,

tionally halogen- or dialkylamino-

with three functional groupings
meanings mentioned below;

H, NH or NH₂;

peptide derivative or a spermine or
aminoglycane or a non-peptidic

0, 1 or 2; wherein

11. The combination according to claim 10, wherein the carrier is a collagen sponge.
12. The combination according to any one of claims 1 to 7, wherein the carrier is a carrier which is obtainable by cross-linkage of a copolymer as defined in claim 1.
13. Use of a combination according to any one of claims 1 to 12 for the transfer of a nucleic acid into cells.
14. A pharmaceutical composition containing a combination according to any one of claims 1 to 12.
15. A kit containing a carrier and a copolymer or a complex as defined in claim 1.